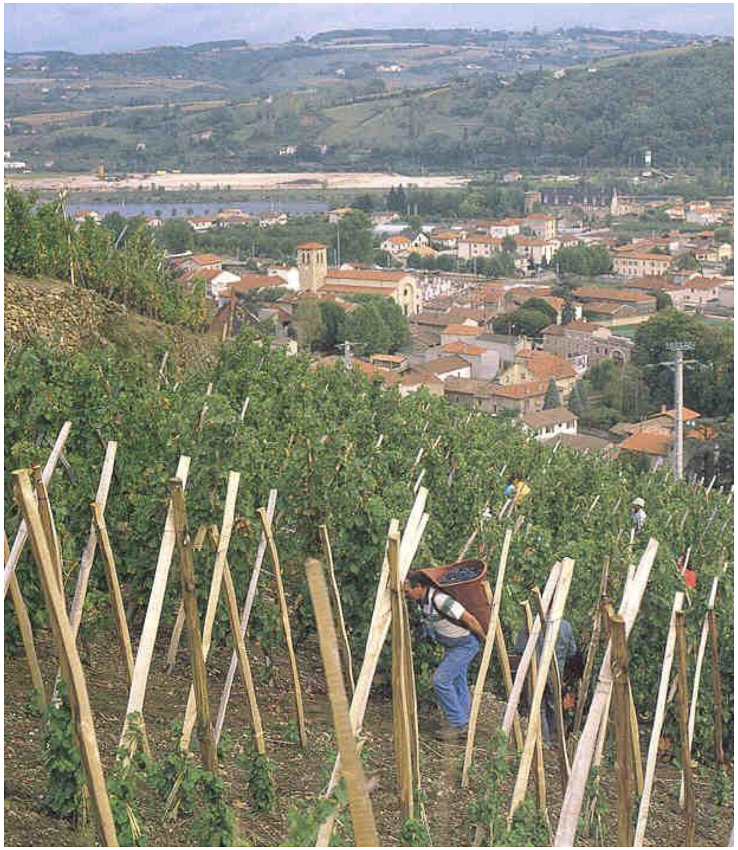
The Australian Wine
Research Institute

INTERNATIONAL SHIRAZ PRODUCTION AND PERFORMANCE

Peter Dry AWRI (peter.dry@awri.com.au)
and **Kym Anderson** Univ Adelaide
(kym.anderson@adelaide.edu.au)




Shiraz Vines
Planted by Joachim
& Carl Zerk
in 1887

International Shiraz production and performance

The Australian Wine Research Institute

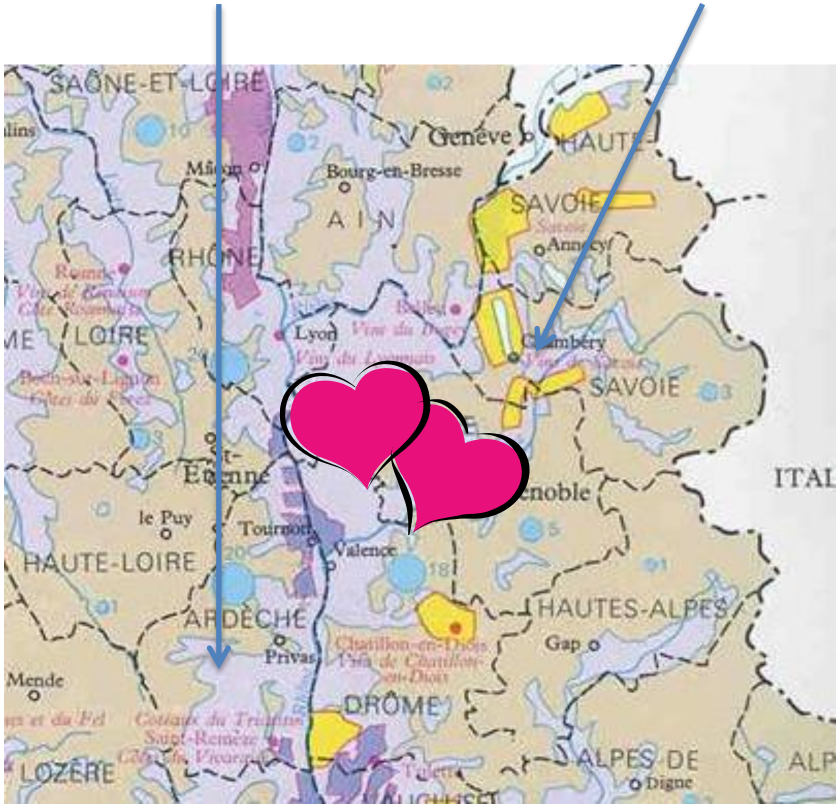
- Origin
- International plantings
- Recent history and development in other countries
- Importance in Australia
- Reasons for success in Australia
- Idiosyncrasies
- Climatic comparison



Where does Shiraz come from?

The Australian Wine Research Institute

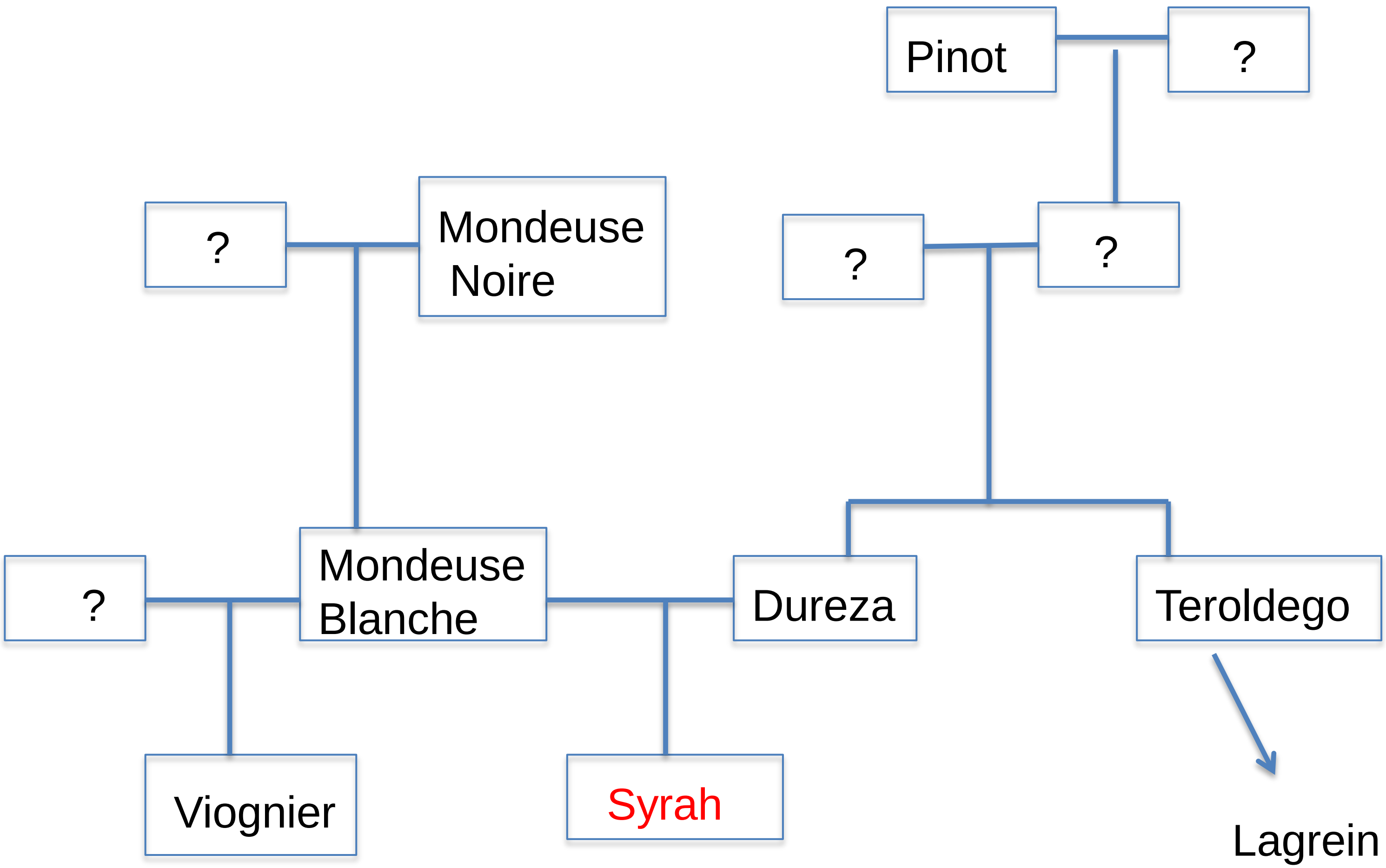
- First documented in 1781 in northern Rhone
  - Small amounts of white grapes incl. Viognier used for blending
- Natural cross of Dureza♂ x Mondeuse Blanche♀



Possible family tree

The Australian Wine Research Institute

Source: Robinson et al. (2012) Winegrapes



Hermitage

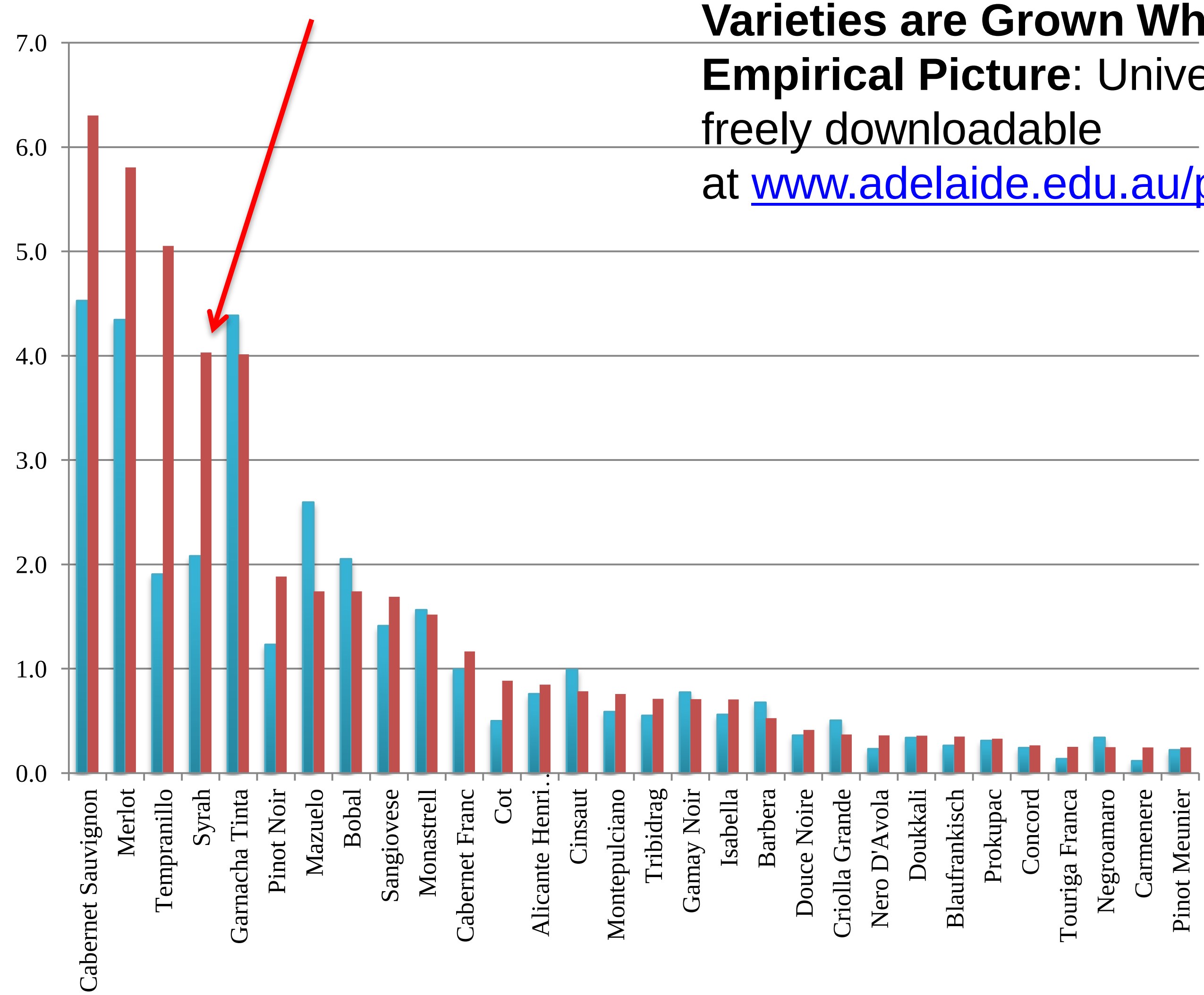
The Australian Wine
Research Institute



Top 30 red varieties: shares (%) of global wine area, 2000 and 2010

The Australian Wine Research Institute

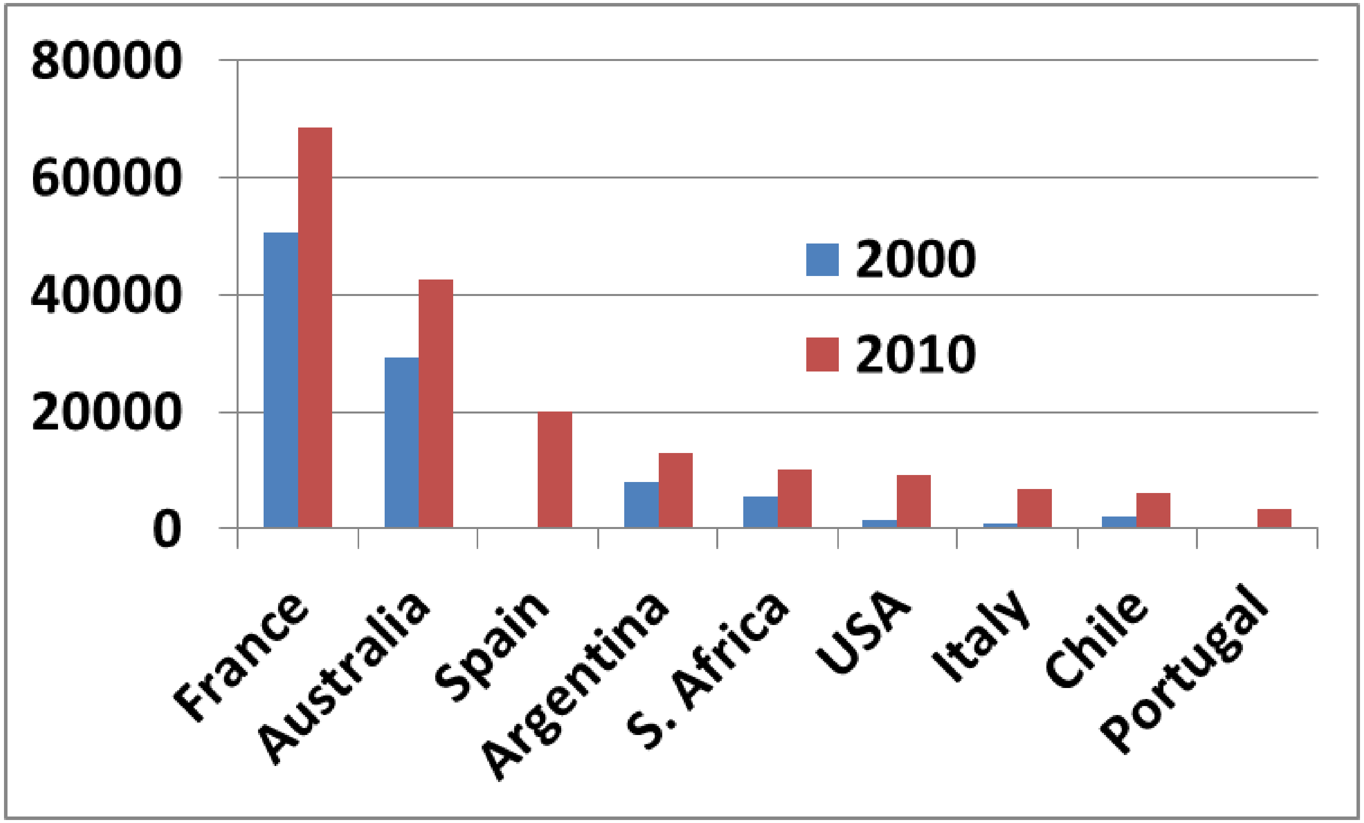
Source: Anderson, K. (2013) **Which Winegrape Varieties are Grown Where? A Global Empirical Picture**: University of Adelaide Press. freely downloadable at www.adelaide.edu.au/press/titles/winegrapes



Bearing areas (ha) in major countries: 2000 and 2010

The Australian Wine Research Institute

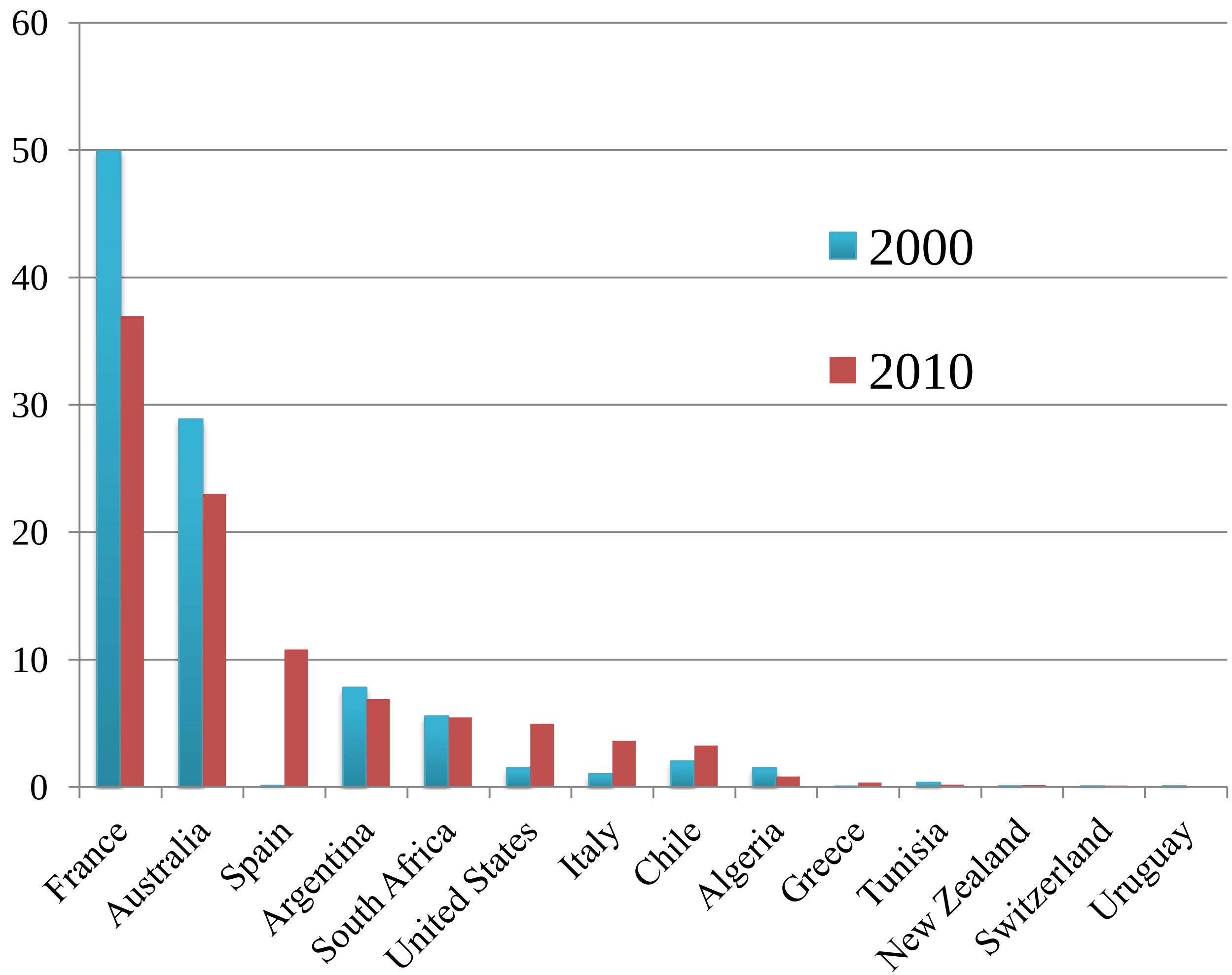
Source: Anderson 2014



National shares (%) of global winegrape area of Shiraz, 2000 and 2010

The Australian Wine Research Institute

Source: Anderson 2014



Recent history and distribution

The Australian Wine Research Institute

- France
  - 1600 ha in 1958 → > 10 fold increase since
  - new plantings mainly in south, partic. Languedoc-Roussillon
  - usually blended



Recent history and distribution

The Australian Wine Research Institute

- Spain
  - 20,000 ha (2010)
  - Castilla La Mancha
- Italy
  - 6,700 ha (2010)
  - Tuscany, Sicily



Recent history and distribution

- USA: 9,200 ha (2010)
- California
  - 8,000 ha
  - Dwarfed by Cab S, Merlot and Zinfandel despite success of some wines
  - Mainly Central Coast



Recent history and distribution

The Australian Wine Research Institute

- Washington
  - More enthusiastic
  - 1380 ha
  - no 3 red variety
    after Cab Sauv and Merlot

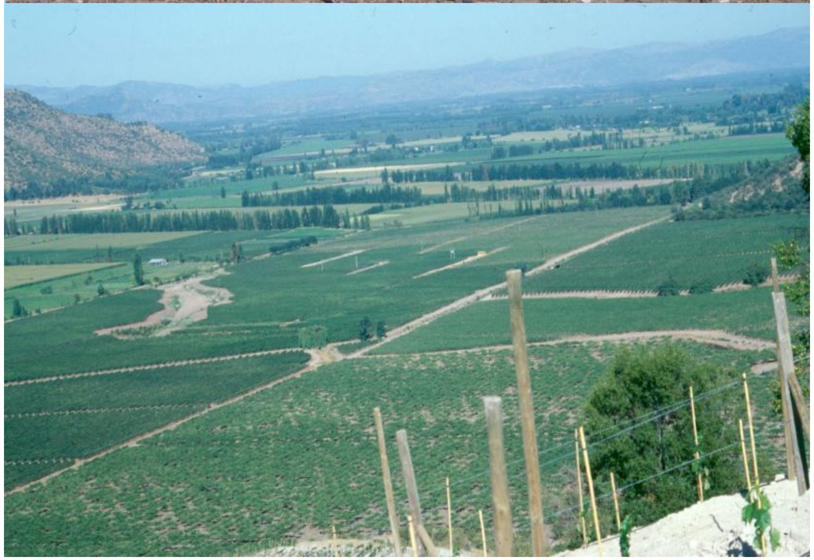


Recent history

The Australian Wine Research Institute

- South Africa
- Argentina
  - Mendoza
- Chile
  - Colchagua
- Thailand







New Zealand

The Australian Wine Research Institute

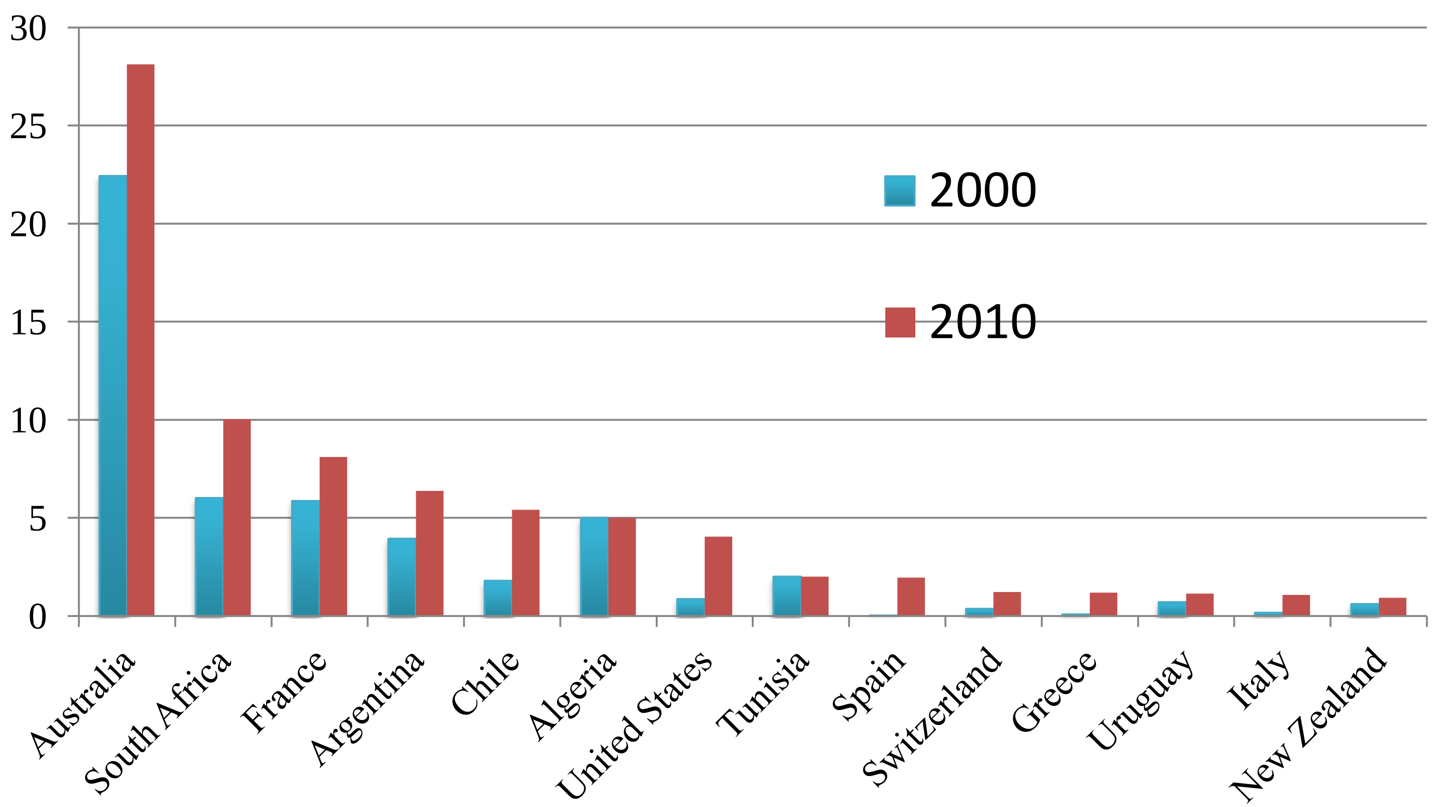
- 420 ha (2013)
- 3rd red after Pinot N (2500 ha) and Merlot



Shares of Shiraz in national winegrape area, 2000 and 2010

The Australian Wine Research Institute

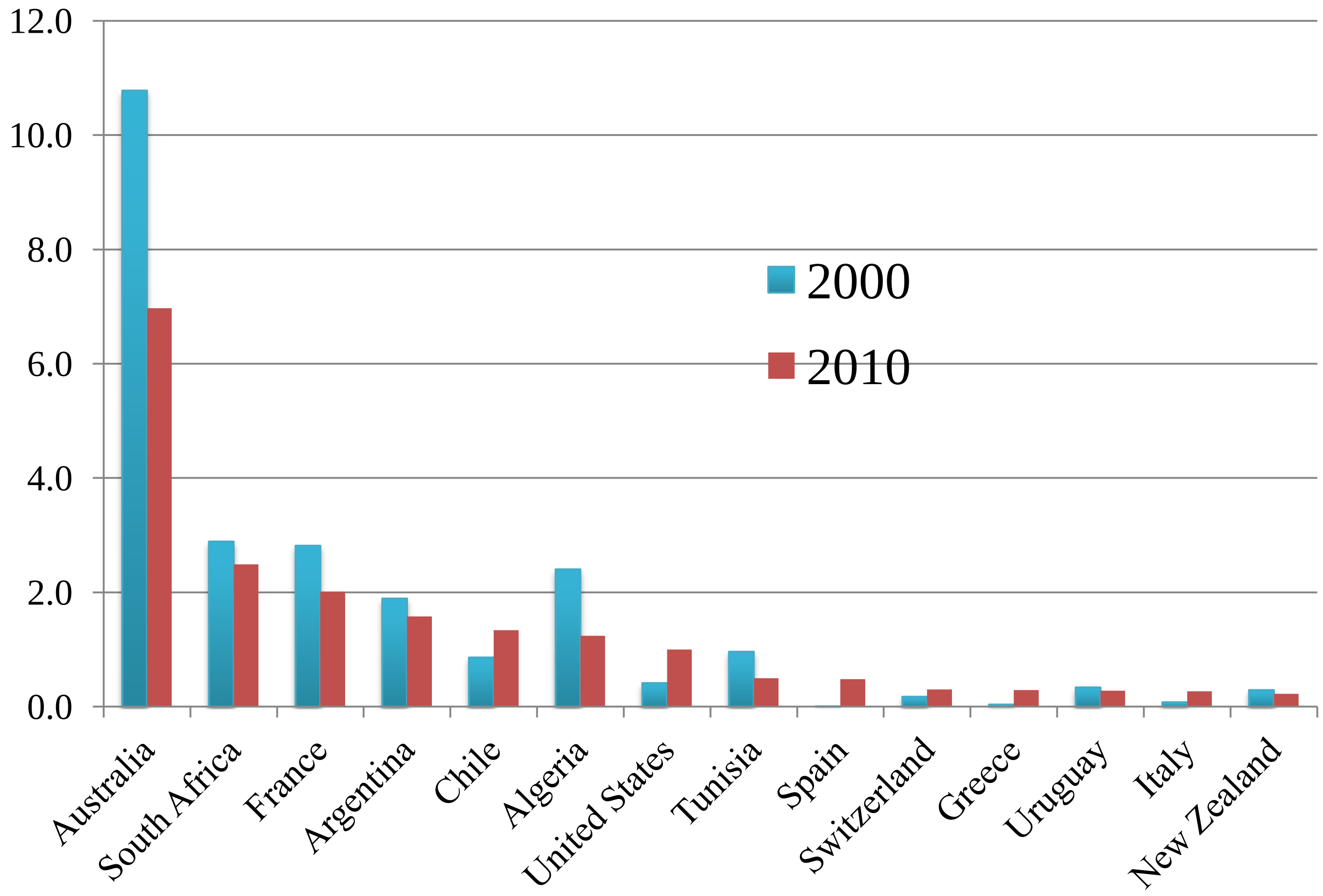
Source: Anderson 2014



Varietal Intensity Index for Shiraz, 2000 and 2010

The Australian Wine Research Institute

Source: Anderson 2014



Distribution aided by global warming

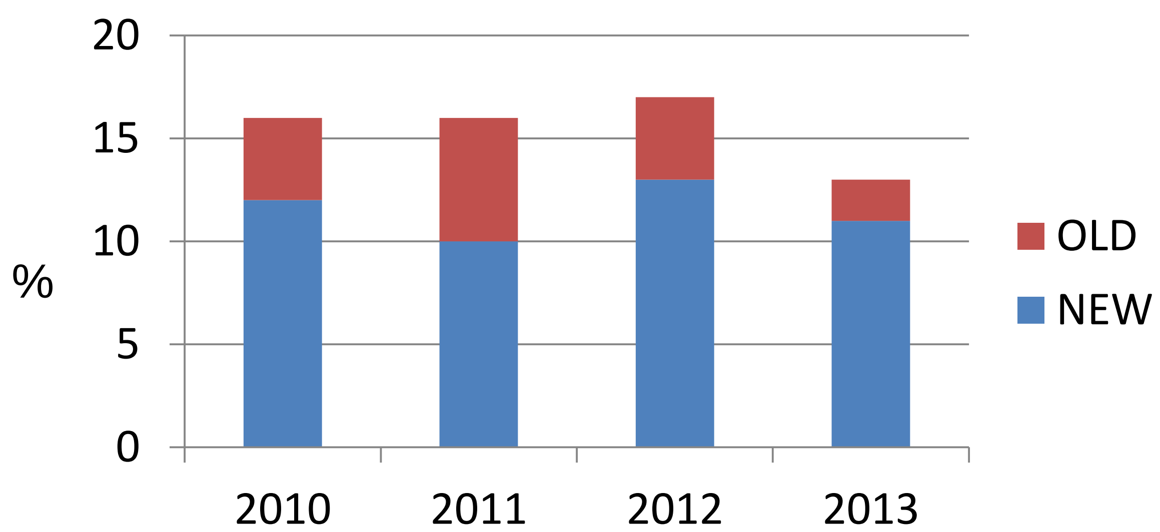
The Australian Wine
Research Institute



Most exciting variety internationally

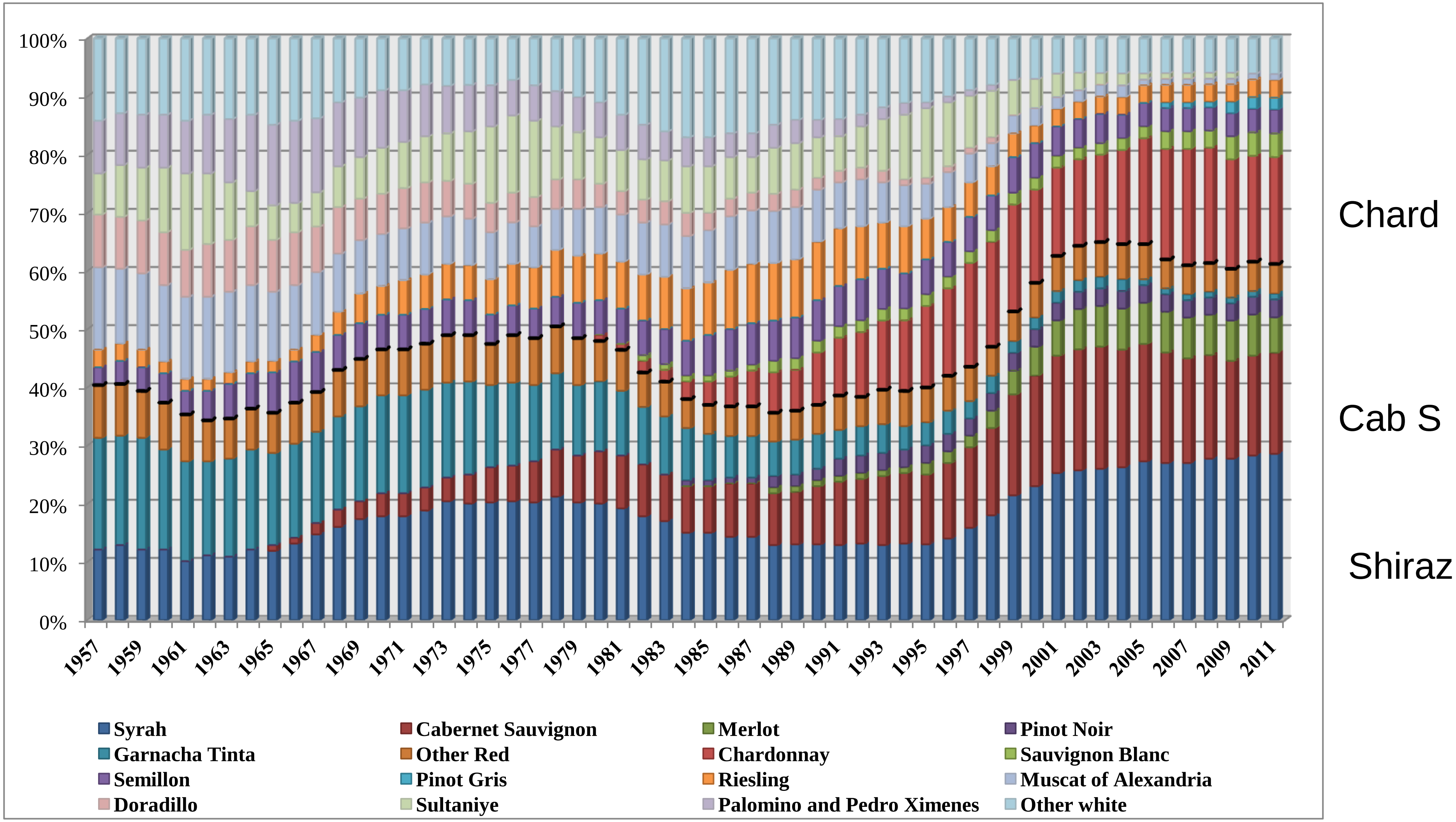
The Australian Wine Research Institute

- Wine Spectator ‘100 most exciting wines of the year’
- Since 2005, Shiraz has polled highest
  - majority = New World



Varietal share (%) since 1957, Australia

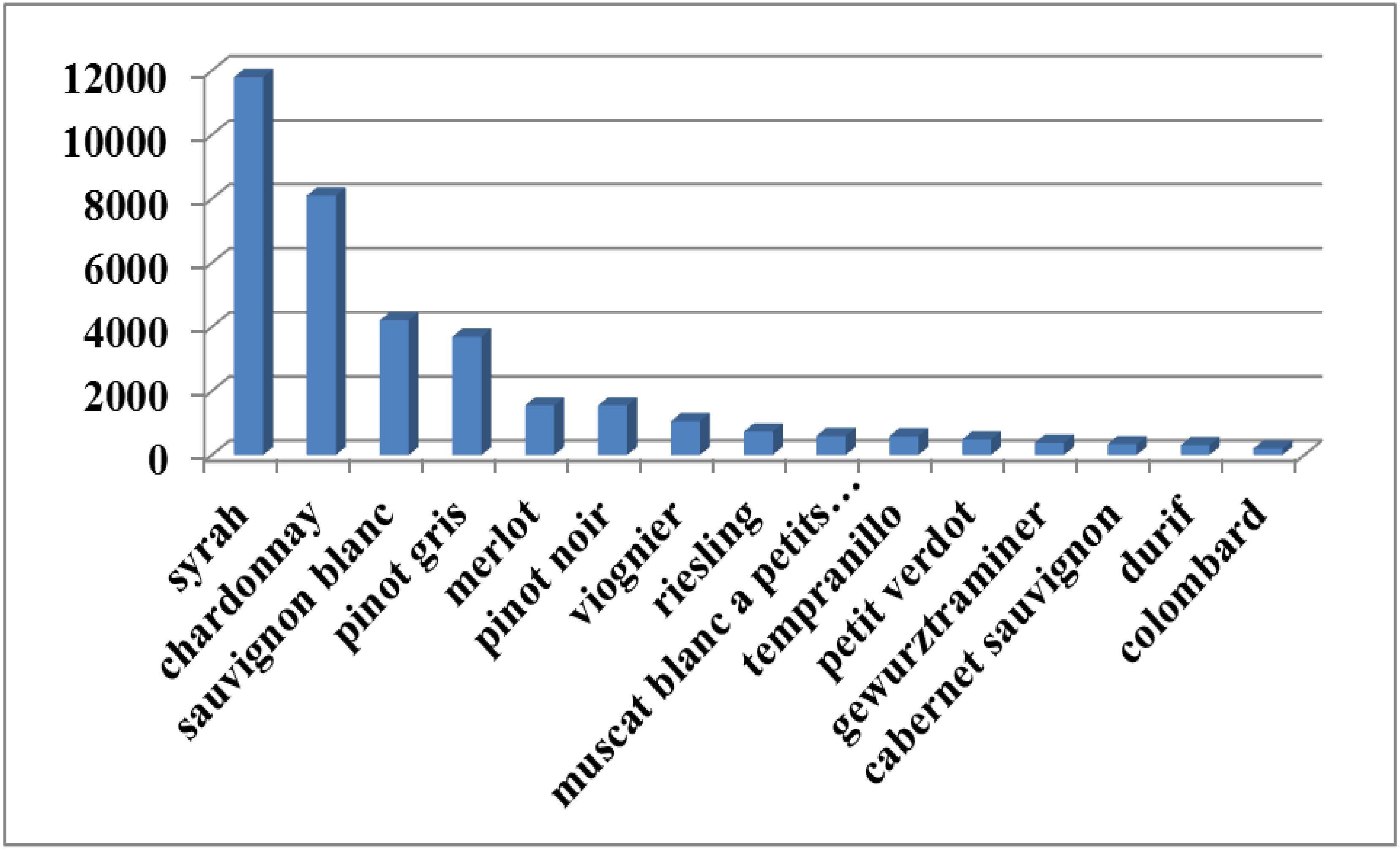
The Australian Wine Research Institute



Source: Anderson prev unpub

Change in bearing area for most-expanded varieties, Australia, 2001 to 2012 (hectares)

The Australian Wine Research Institute

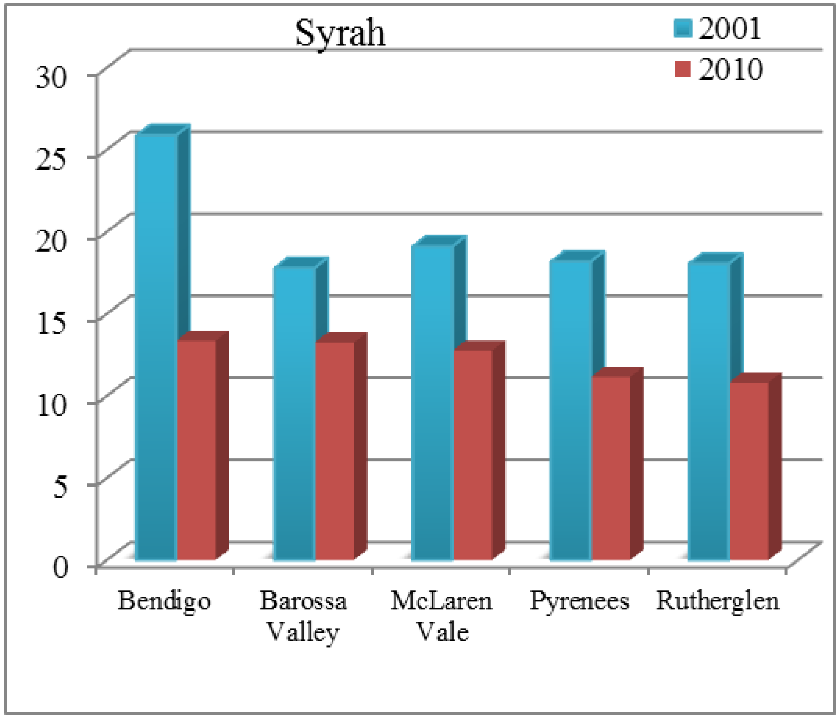


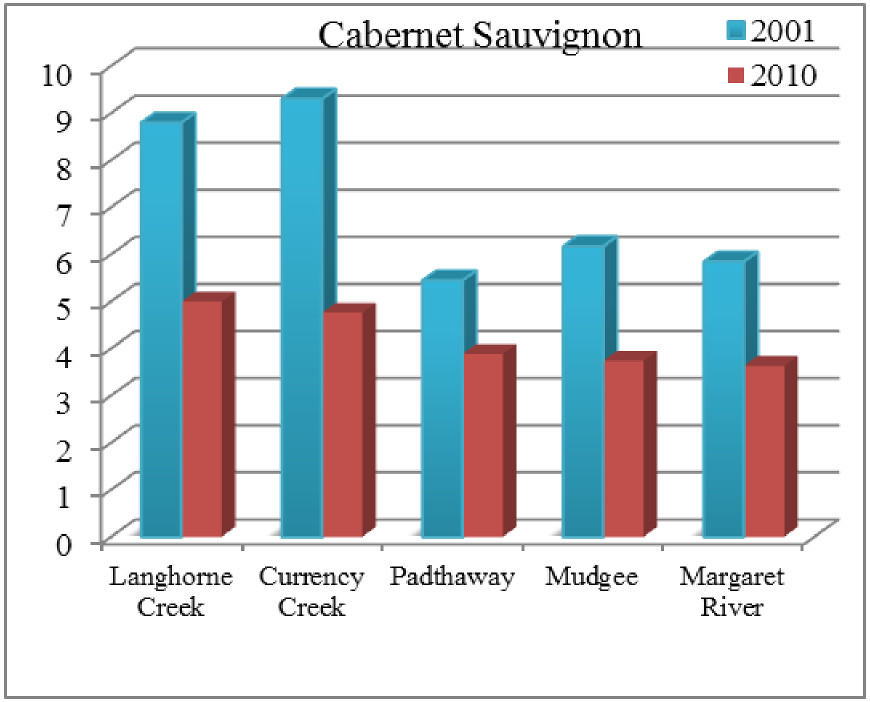
Source: Anderson 2014

Australian regions with largest Varietal Intensity Index
relative to global average: 2001 and 2010

The Australian Wine Research Institute

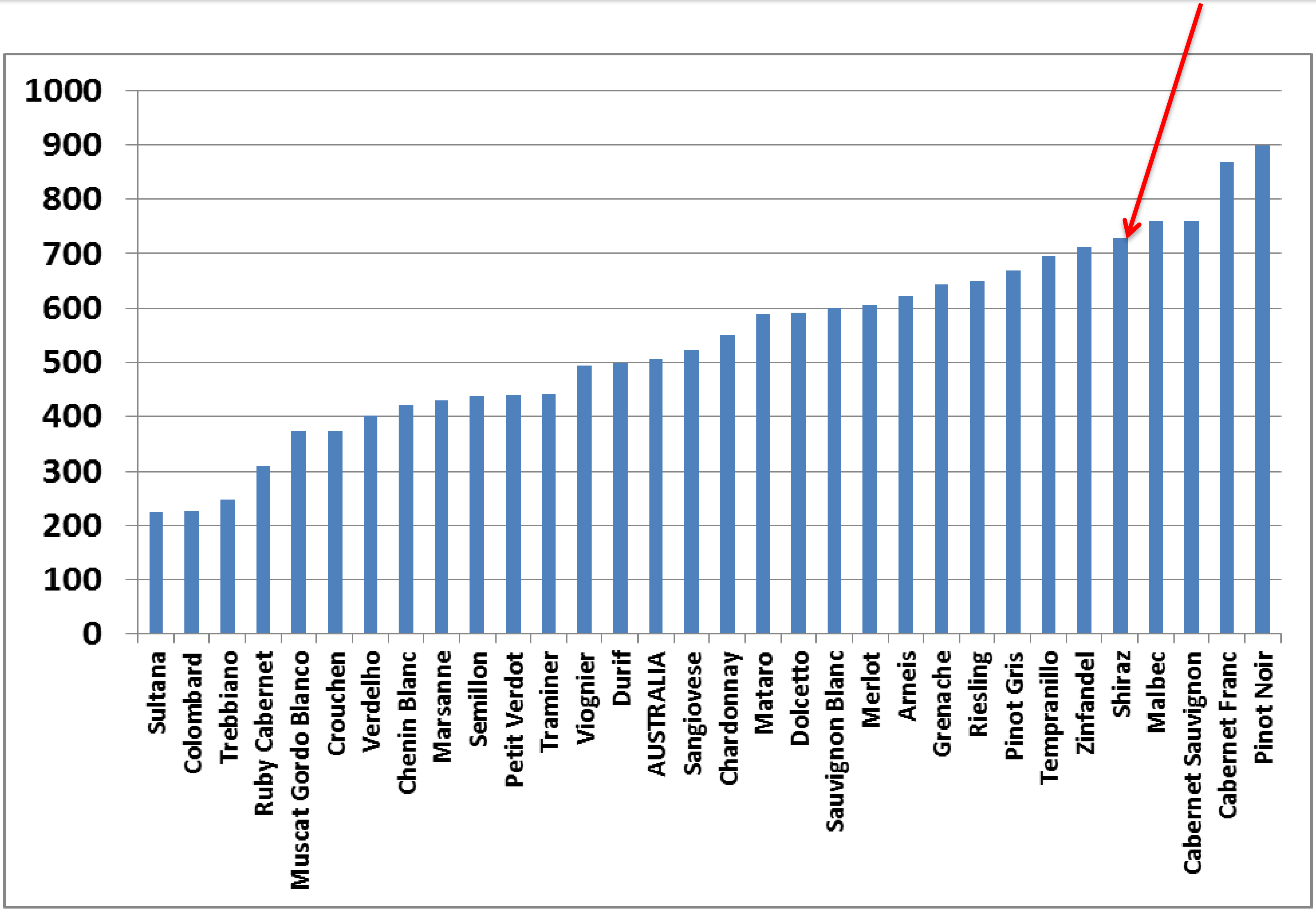
Source: Anderson 2014





National average prices of main winegrape varieties, Australia, 2013

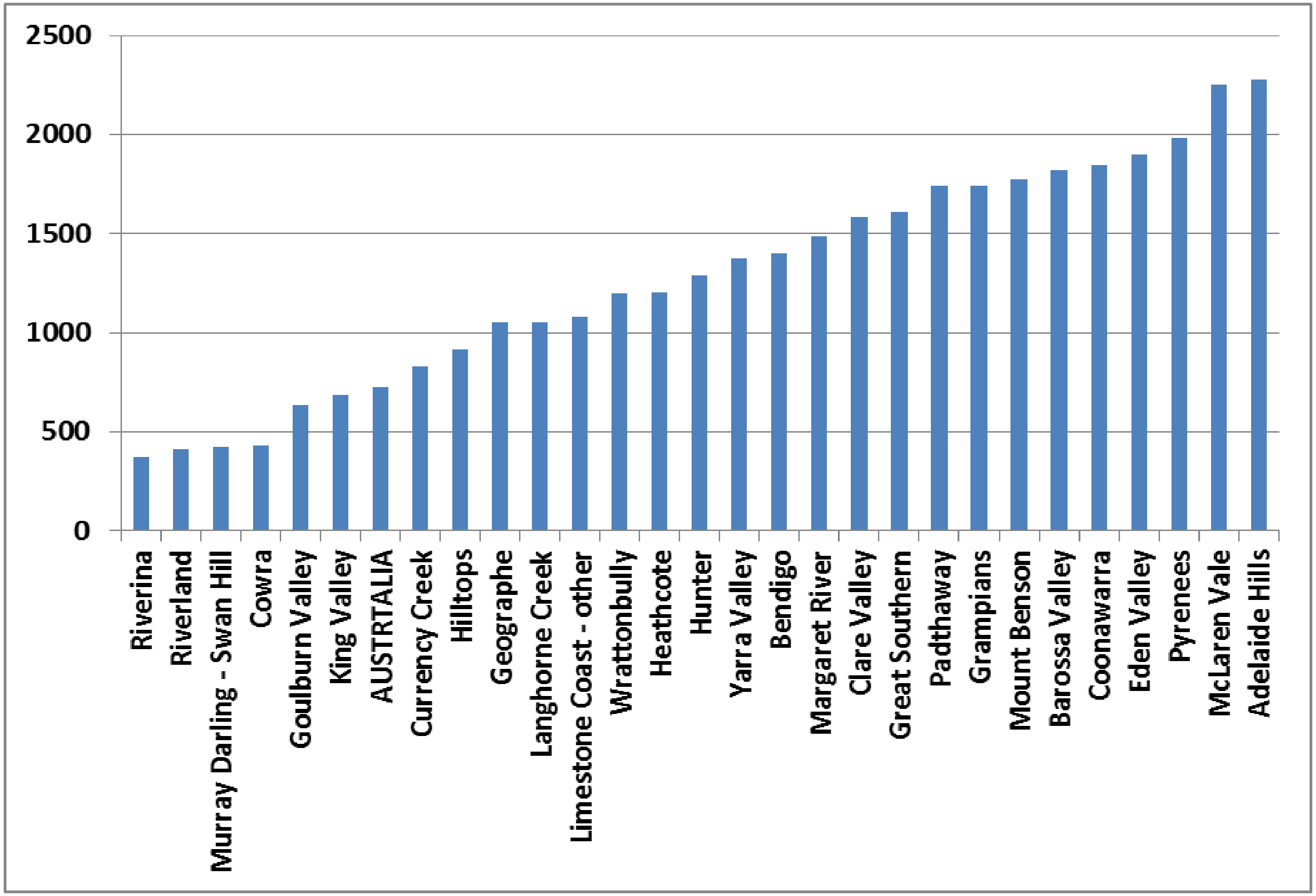
The Australian Wine Research Institute



Source: Anderson 2014

Average price of Shiraz by region, Australia, 2013

The Australian Wine Research Institute



Source: Anderson 2014

Dominance of Shiraz wines in Langtons Classification VI

The Australian Wine Research Institute

- Exceptional 11/16
- Outstanding 26/52
- Excellent 30/66
- = 50% overall



Is it our most versatile variety in Australia?

The Australian Wine
Research Institute



Mornington Peninsula

The Australian Wine
Research Institute



Idiosyncrasies of Shiraz

The Australian Wine
Research Institute

- Significant berry shrivel/weight loss late in ripening
  - From about 90 to 100 days after flowering
  - Water loss by berry
    - only when combination of backflow via xylem (remains hydraulically connected) and low cell vitality

- Very susceptible to primary bud necrosis
  - Reduces productivity
  - Also Viognier



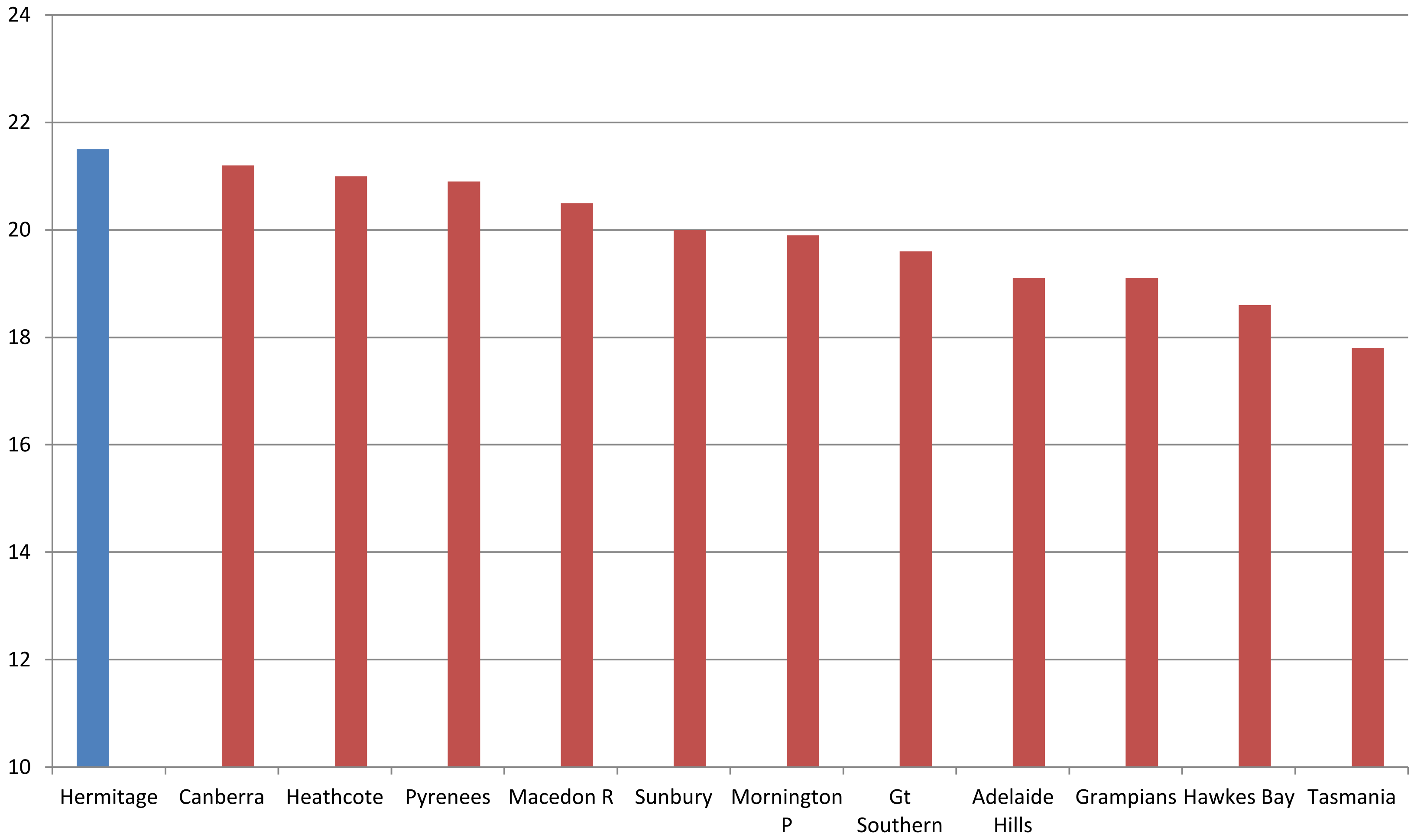


Balhannah, Adelaide Hills, SA



MJT (°C):
Australian regions (1980-2010 mean)

The Australian Wine
Research Institute



Shiraz ripening month

The Australian Wine Research Institute

Region	Mean temp °C	TVA	Sunshine hrs	Rel humidity
Hermitage	19.6	low	high	moderate
Canberra, Heathcote, Pyrenees	19.5 -20.4	moderate	high	low
Sunbury, Great Sthn, Grampians (Macedon R)	16.9 – 19.3	moderate to high	low to moderate	moderate
Adelaide Hills*	14.9	high	moderate	moderate
Mornington, Hawkes Bay Tasmania	14.5 – 18.0	low	low	moderate to high

Adapted from Gladstones (1992) Viticulture and Environment
TVA = temperature variability index
* Estimate for Balhannah 400 m